IN THE CLAIMS

Claims 1-16 (Canceled).

Claim 17 (New): A process for producing a hot plate comprising

an insulating substrate having an upper face and a lower face having a surface roughness of 2 μm or less and

a resistance element; which comprises:

forming said resistance element on the lower face of the insulating substrate by a film-depositing method based on a dry process;

wherein the resistance element has a thickness dispersion of ± 3 μm or less.

Claim 18 (New): The process as claimed in claim 17, wherein the lower face of the insulating substrate has a roughness of 1 μm or less.

Claim 19 (New): The process as claimed in claim 17, wherein the lower face of the insulating substrate has a roughness of 0.5 μm less.

Claim 20 (New): The process as claimed in claim 17, wherein the lower face of the insulating substrate has a roughness of 0.1 μm or less.

Claim 21 (New): The process as claimed in claim 17, wherein the thickness dispersion being the larger of the absolute value of Tmax – Tav and the absolute value of Tmin – Tav,

Tav being an average thickness obtained by averaging thicknesses of arbitrarily selected 10 points of the resistance element, Tav being within a range of 3 to 500 μm,

Tmax being the maximum thickness of said 10 points, and

Tmin being the minimum thickness of said 10 points.

Claim 22 (New): The process as claimed in claim 17, wherein the thickness of the resistance element is from 1 to 10 μm.

Claim 23 (New): The process as claimed in claim 17, wherein the insulating substrate comprises a ceramic which is selected from the group consisting of a nitride ceramic, a carbide ceramic, and combinations thereof.

Claim 24 (New): The process as claimed in claim 17, wherein the resistance element has a multilayer structure, and among a plurality of layers constituting the resistance element, the layer nearest to the insulating substrate comprises titanium or chromium.

Claim 25 (New): The process as claimed in claim 17, wherein the resistance element comprises a first layer comprising titanium; a second layer comprising molybdenum and having a larger thickness than the first layer, on the first layer; and a third layer comprising nickel and having an intermediate thickness between the thickness of the first layer and that of the second layer, on the second layer.

Claim 26 (New): The process as claimed in claim 17, wherein the resistance element comprises a titanium layer having a thickness of 0.1 to 0.5 μm, a molybdenum layer having a

thickness of 0.5 to 7.0 μm, on the titanium layer, and a nickel layer having a thickness of 0.4 to 2.5 μm, on the molybdenum layer.

Claim 27 (New): A process for producing a hot plate comprising

an insulating substrate having an upper face and a lower face having surface roughness of 2 μm or less and

a resistance element; which comprises:

forming said resistance element on the lower face of the insulating substrate by RF sputtering;

wherein the resistance element has a thickness dispersion of ± 3 μm or less.

Claim 28 (New): The process as claimed in claim 27, wherein the lower face of the insulating substrate has a roughness of 1 μm or less.

Claim 29 (New): The process as claimed in claim 27, wherein the lower face of the insulating substrate has a roughness of 0.5 μm less.

Claim 30 (New): The process as claimed in claim 27, wherein the lower face of the insulating substrate has a roughness of 0.1 μm or less.

Claim 31 (New): The process as claimed in claim 27, wherein the thickness dispersion being the larger of the absolute value of Tmax – Tav and the absolute value of Tmin – Tav,

Tav being an average thickness obtained by averaging thicknesses of arbitrarily selected 10 points of the resistance element, Tav being within a range of 3 to 500 μm,

Tmax being the maximum thickness of said 10 points, and

Tmin being the minimum thickness of said 10 points.

Claim 32 (New): The process as claimed in claim 27, wherein the thickness of the resistance element is from 1 to 10 μm.

Claim 33 (New): The process as claimed in claim 27, wherein the insulating substrate comprises a ceramic which is selected from the group consisting of a nitride ceramic, a carbide ceramic, and combinations thereof.

Claim 34 (New): The process as claimed in claim 27, wherein the resistance element has a multilayer structure, and among a plurality of layers constituting the resistance element, the layer nearest to the insulating substrate comprises titanium or chromium.

Claim 35 (New): The process as claimed in claim 27, wherein the resistance element comprises a first layer comprising titanium; a second layer comprising molybdenum and having a larger thickness than the first layer, on the first layer; and a third layer comprising nickel and having an intermediate thickness between the thickness of the first layer and that of the second layer, on the second layer.

Claim 36 (New): The process as claimed in claim 27, wherein the resistance element comprises a titanium layer having a thickness of 0.1 to 0.5 μm, a molybdenum layer having a thickness of 0.5 to 7.0 μm, on the titanium layer, and a nickel layer having a thickness of 0.4 to 2.5 μm, on the molybdenum layer.

Claim 37 (New): A process for producing a hot plate comprising

an insulating substrate having an upper face and a lower face having surface roughness less than 2 μm and

a resistance element; which comprises:

forming said resistance element on the lower face of the insulating substrate by

printing a resistance element paste comprising scaly nobel metal powder and

firing the resistance element paste;

wherein the resistance element has a thickness dispersion of ± 3 μm or less.

Claim 38 (New): The process as claimed in claim 37, wherein the lower face of the insulating substrate has a roughness of 1 μm or less.

Claim 39 (New): The process as claimed in claim 37, wherein the lower face of the insulating substrate has a roughness of 0.5 μm less.

Claim 40 (New): The process as claimed in claim 37, wherein the lower face of the insulating substrate has a roughness of 0.1 μm or less.

Claim 41 (New): The process as claimed in claim 37, wherein the thickness dispersion being the larger of the absolute value of Tmax – Tav and the absolute value of Tmin – Tav,

Tav being an average thickness obtained by averaging thicknesses of arbitrarily selected 10 points of the resistance element, Tav being within a range of 3 to 500 μm,

Tmax being the maximum thickness of said 10 points, and

Tmin being the minimum thickness of said 10 points.

Claim 42 (New): The process as claimed in claim 37, wherein the thickness of the resistance element is from 1 to 10 μm.

Claim 43 (New): The process as claimed in claim 37, wherein the insulating substrate comprises a ceramic which is selected from the group consisting of a nitride ceramic, a carbide ceramic, and combinations thereof.

DISCUSSION OF THE AMENDMENTS

The Specification is amended to correct a typographical error. The typographical error pertains to measured surface roughness (Ra) of the insulating substrate (IS) described in Sample 1 (S1) on page 13. In the Specification, as originally filed, the S1-IS-Ra is listed as "0.3 μm," while it should read "0.5 μm." Support for this amendment is found on page 14, lines 23-24 and Fig. 4A along with page 14, lines 9-10.

The Abstract is amended to remove the phrase "of the present invention." A clean copy of the Abstract is attached at the end of this paper.

Claims 14-16 are pending. Claims 1-16 are canceled without prejudice. Claims 17-43 are added. Support new claims 17-43 is found in the claims and specification, as originally filed. Support for the surface roughness limitation is found on page 6, lines 11ff. Support for the limitations directed to the layered aspects and thickness of a resistance element is found on page 8, lines 23 ff. Support for the defining terminology of the thickness dispersion is found on page 3, lines 10 ff. Upon entry of the amendment, claims 17-43 will be active.

No new matter is believed to have been added upon entry of the amendment.